Conversing with social agents that smile and laugh

Abstract

Our aim is to create virtual conversational partners. As such we have developed computational models to enrich virtual characters with socio-emotional capabilities that are communicated through multimodal behaviors. The approach we follow to build interactive and expressive interactants relies on theories from human and social sciences as well as data analysis and user-perception-based design. We have explored specific social signals such as smile and laughter, capturing their variation in production but also their different communicative functions and their impact in human-agent interaction. Lately we have been interested in modeling agents with social attitudes. Our aim is to model how social attitudes color the multimodal behaviors of the agents. We have gathered a corpus of dyads that was annotated along two layers: social attitudes and nonverbal behaviors. By applying sequence mining methods we have extracted behavior patterns involved in the change of perception of an attitude. We are particularly interested in capturing the behaviors that correspond to a change of perception of an attitude. In this talk I will present the GRETA/VIB platform where our research is implemented.

Biography

Catherine Pelachaud is a Director of Research at CNRS in the laboratory ISIR, University of Pierre and Marie Curie. Her research interests include embodied conversational agents, nonverbal communication (face, gaze, and gesture), expressive behaviors and socio-emotional agents. With her research team, she has been developing an interactive virtual agent platform GRETA that can display emotional and communicative behaviors. She has been involved and is still involved in several European projects related to believable embodied conversational agents, emotion and social behaviors. She is an associate editor of several journals, including IEEE Transactions on Affective Computing, ACM Transactions on Interactive Intelligent Systems and Journal on Multimodal User Interfaces. She has co-edited several books on virtual agents and emotion-oriented systems. She has participated in the organization of such international conferences as IVA, ACII and AAMAS, virtual agent track. She is the recipient of the ACM – SIGAI Autonomous Agents Research Award 2015.